ABSTRACT

A method of analyzing a communication network DETERMINES a mean drop rate in a device x by polling each device from a network management computer (NMC) which is in communication with the network, and processing signals in the NMC to determine a drop rate D(x), in accordance with:

$$D(x) = ((L+(x)-L-(x))/2,$$

and $L(x) = 1-A(x)$

where

A(x): the fraction of poll requests from the NMC to device x for which the NMC receives replies (measured over the last M sampling periods), (wherein x must not be broken),

D(x): the mean frame drop rate in device x,

L(c): NMC's perception of the loss rate to device x and back,

L-(x): the NMC's perception of the mean value of L(z) for all devices z connected to device x, closer to the NMC than device x and which are not broken, and

L+(x): the NMC's perception of the mean value of L(z) for all devices z connected to device x, further away from the NMC than device x and which are not broken.